Surviving Technical Rescue

INDIANA FIRE CHIEFS ASSOCIATION

TECHNICAL RESCUE SECTION

Overview

- Technical Rescue in the State of Indiana is comprised of many disciplines and provided by many agencies.
- The purpose of the Indiana Technical Rescue Committee is to develop a statewide Technical Rescue and US&R response system that is an extension of local response capabilities.

TRT vs. USAR –the differences?

Technical Rescue Team

- ***LIGHT-FAST-MOBILE – IS THE KEY!!!***
- Recognized Terminology by IDHS for District Teams
- Local or Regional Asset – activated through Mutual Aid or IMARP
- 24 hour deployment window
- 12-36 member deployment
- Includes
  - Rescue Component w/ Engineer – NIMS Type I/II Collapse Cache
  - May or may not have Haz-Mat, Medical, K9, Tech Search Elements if they do exist not designed to be the same capabilities as a USAR Team

Urban Search & Rescue Team

- 36-80 member deployment
- Federal or State Asset – requires disaster declaration or EMAC
- Up to 14 day deployment
- Includes:
  - Rescue Component with Engineer – NIMS Type I/III USAR Cache
  - Haz-Mat / WMD
  - Logistics
  - Medical including Docs
  - Tech Search
  - K-9
  - Plans/Command Component

Technician V/M, Rope, Con Space, Trench, Type I Collapse

Technician V/M, Rope, Con Space, Trench, Type III Collapse

Rope Technician only

Technician V/M, Rope, Con Space, Trench, Type III Collapse

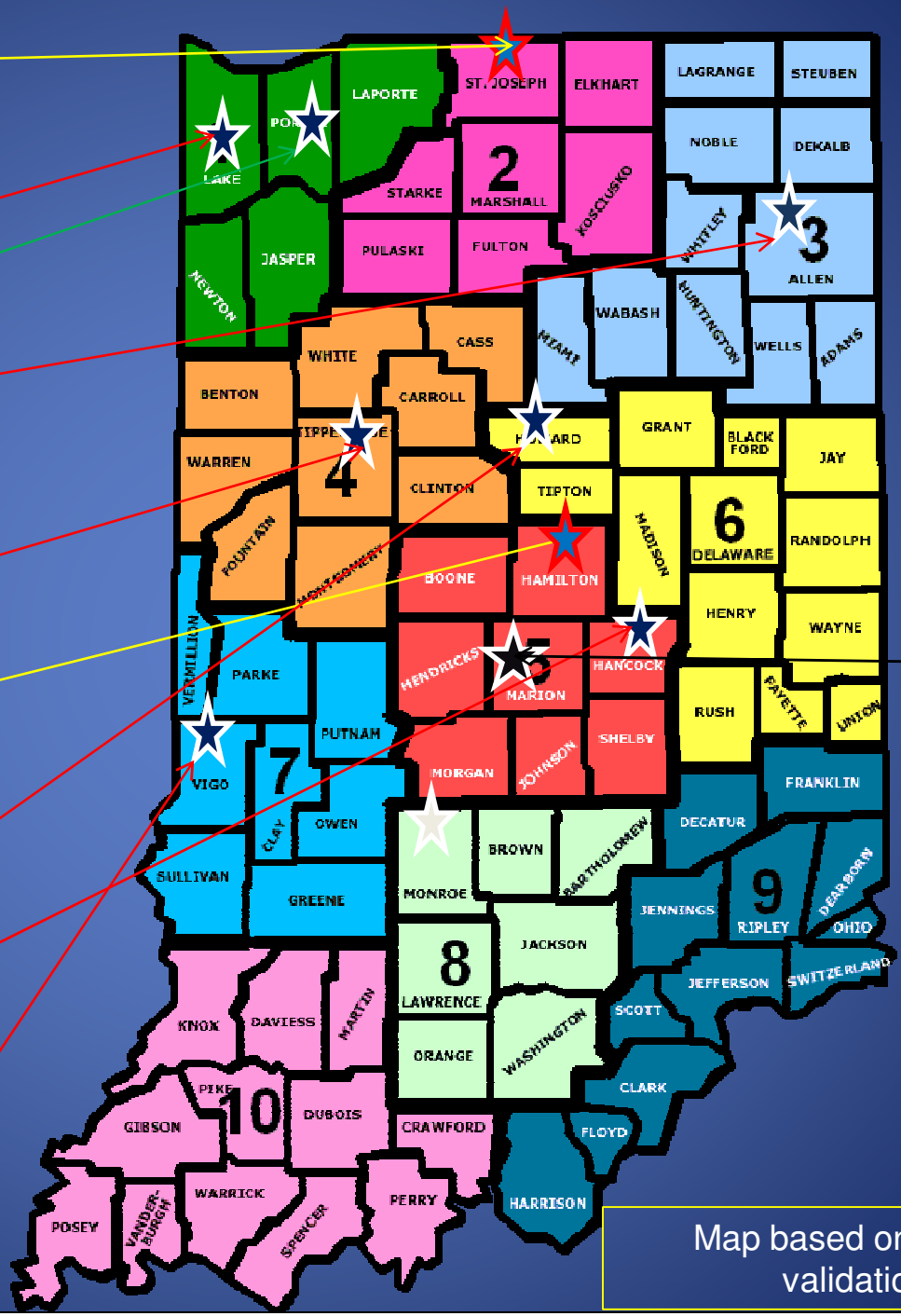
Technician V/M, Rope, Con Space, Trench, Type III Collapse

Technician V/M, Rope, Con Space, Trench, Type I Collapse

Technician V/M, Rope, Con Space, Ops Trench, NO Collapse

Technician V/M, Rope, Con Space, Ops Trench, NO Collapse

Ops V/M, Tech Rope, Con Space, Ops Trench, NO Collapse



INTF1

Map based on recent validation


Indiana Technical Rescues


10/10/2007


FIRE


10 19 2007

Committee Members

- Committee Co-Chairs
  - Brian Kazmierzak – bpk@clayfd.com
  - Steve White – whites@fishers.in.us
- District 1 – Tim Tully
- District 2 – Aaron Bollinger
- District 3 – James McIntosh
- District 4 – Mike Blann
- District 5 – Russ Shoaf (Certification Chair)
- District 6 – Aaron Ashburn

Committee Members

- District 7 – Jay Umbaugh
- District 8 – VACANT
- District 9 – John Saulman
- District 10 – Eddie King
- INTF-1 – Bill Brown
- Water Rescue Sub-Committee Co-Chairs
  - Clinton Crafton
  - Chris Baker

Goals of the IFCA TRT Section

- Identify Technical Rescues Teams and determine capabilities through validation
  - Common Training
  - Common Equipment Cache
- Establish a line of communications between teams, districts & IDHS
- Be a common voice for Indiana TRT's
- Coordinate IDHS TRT Funding - Obtain Training & Educational Resources
- Develop capabilities in Southern Indiana

Recent Tech Rescue Close Calls & LODDs

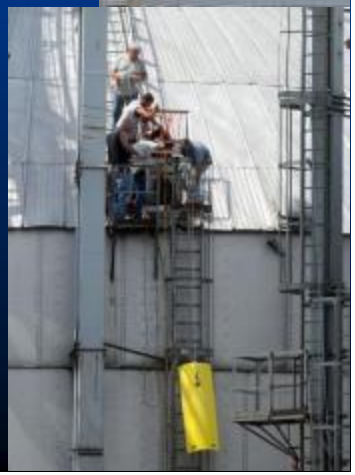
- 2 very close calls in Indiana during the past year involving Confined Spaces – 1 Well, 1 Grain Bin.
- One Close Call in Ohio - Sewer
- Double LODD – Tarrytown, NY – Sewer behind firehouse


24-HOUR NEWS 8
Well Accident
CHOPPER 8
6:01
85°
DEADLY WELL ACCIDENT

New Jersey – One FF Injured in Secondary Collapse

Purdue Grain Bin Class

- Lacks in several areas
  - Grain Bin is a PERMIT REQUIRED Confined Space
  - Just because you have “Grain Bin Tube Training” you can not enter a bin without Confined Space Training
  - Engulfment Hazard
  - Dust/Respiratory Hazard
  - **GRAIN BINS ARE DANGEROUS & REQUIRE TRT RESPONSE!**



General

- Each AHJ needs to establish an Incident Response Plan to include policies and procedures for technical rescue operations in accordance with NFPA 1670 (Establish SOG's and SOP's)
- AHJ has complete control over all resources requested
- AHJ has authority to stop all rescue attempts

General

- Safety at a technical rescue
  - Personnel accountability system (PAS)
    - Account for all members at incident
- Evacuation procedures / guideline
  - **Everyone** operating at the incident must know correct actions if evacuation order is given
- Evacuation Signals (example from FEMA US&R)
  - Evacuate – 3 short blasts (1 second each)
  - Cease Operations – 1 long blast (3 seconds long)
  - Resume Operations – 1 long and 1 short blast

General

- Hazard & risk assessment (scene size-up)
  - Continuous (Six sided approach)
  - Every technical rescue, no matter what magnitude, can change in a second
  - Initial size-up will set ground work for entire incident

General

- Size-up (con't)
  - Scope, magnitude, nature of incident
  - Location and number of victims
    - Time of day, Area affected, complexity of incident
  - Risk / benefit analysis
    - Will the end result justify the means
  - Pre-plans
    - May provide structure information
  - Environmental factors
    - Extreme heat and cold

General

- Size-up (con't)
  - Patient contact/condition
    - » Your safety is paramount
    - » Can you see or hear patients?
    - » Hailing, tag lines, radios, con-space systems
    - » Does the patient know where they are?
- Availability / needed resources
  - What resources do you need?
  - What resources do you have available?

General

- IMS / ICS
  - In order to manage the incident, command and control must be established.
  - Positions Filled *(minimum)*
    - » Command
      - Responsible for entire incident
    - » Safety
      - Should be trained to level of incident

General

- Additional IMS / ICS Positions to consider
  - » Operations Section Chief
    - Rescue Branch Director
      - – Establish rescue plan
      - – Inform all personnel of the plan
      - – Insure the plan is carried out
  - » Optional Positions
    - Finance, Logistics, Planning, PIO
    - Others outlined in NFPA 1561 *Standard for FD Incident Management*

General

- Scene control
  - Control zones
    - » Hot, warm, cold
  - Witness interviews
    - » Who, what, where, when, why from all people in area
    - » Patient contact
      - Control who talks to victim and what victim hears
    - » Bystander interaction
      - Control zones will keep non-essential people out of harms way

General

- Scene control
  - Police assistance
    - » PD is a valuable resource
  - Machinery / vehicles
    - » Find someone with expertise (machines)
    - » What are the actions of a full cycles machine?
    - » Use apparatus to block traffic, not personnel
  - Utilities
    - » Have emergency contact information ahead of time. Know capabilities and resources.

Initial Company Operations

1.) Establish Strong Visible Command Upon Arrival

Provide initial report

Implement ICS / NIMS

Minimum Positions

Command

Safety

Establish additional Command and General Staff as needed

Consider Unified Command for Complex Incidents

Initial Company Operations

2.) Identify the need for Technical Rescue

Conduct Rapid Size-up considering the following:

- Scope, Magnitude, and Nature of the incident
- Location / complexity of the incident
- Risk vs. Benefit (rescue or recovery)
- Scene Access
- Functional Capabilities of Available Resources
- Location of Additional, Trained Resources
- Environmental Conditions

Initial Company Operations

3.) Recognize General Hazards involved in the incident

Make area safe for all responders

Identify all hazards
Control / Limit Traffic
Control / Limit Access
Mitigate hazards within your capabilities.

Initial Company Operations

4.) Identify the appropriate resources for the incident

Consider Functional Capability
- Awareness
- Operations
- Technician

5.) Initiate the appropriate emergency response system

Consider all available response systems as identified by AHJ
- Local
- County
- State
- National

Initial Company Operations

6.) Initiate Site Control Measures

Establish personnel accountability system (control access points)

Develop Incident Action Plan (communicate the plan to EVERYONE)

Establish an Evacuation Plan (communicate the plan to EVERYONE)

Initial Company Operations

6.) Initiate Site Control Measures (con't)

Secure the general area

Secure Witnesses and conduct interviews for intelligence

Establish Control Zones (rule of thumb)

Hot Zone	100' for critical functions
Warm Zone	200' for support functions
Cold Zone	300' for Command and Control

Outside Cold Zone Liaison to Rest Of World

Initial Company Operations

7.) Establish Patient Contact

(without endangering personnel)

Establish Location of all Patients

Establish Verbal Contact with Patients

Determine Patient Condition
(from a safe distance)

Assist with Surface or NON-ENTRY RESCUE
(without endangering personnel)

Are YOU Prepared

State Certification Process

- **Awareness Level**
  - Seven Disciplines have been combined into one
  - Test is in place
- **Operations and Technician Levels**
  - Rope, Vehicle & Machinery, Trench, Structural Collapse, Confined Space, Swiftwater and Wilderness are completed, meaning there is a test and practical in place for each.
  - Ops & Tech Tests can be taken together

2011 Goals

- Complete re-work of certification process to meet current standards
  - Currently in the hands of IDHS Certification
  - Dive Certification was denied
- Finish TRT Awareness as an online course
- Obtain Phase III exercise funding
  - (D1/2/3 May 2011)
- Vehicle/Machinery Curriculum push out

Other TRT Information

- TRT Bi-Monthly Newsletter – email bpk@clayfd.com to be added to the list
- www.disasterengineer.org
- http://groups.yahoo.com – Search SUSAR
- www.disasterdog.org

Questions

- Contact your District TRT Section Rep or the TRT Section Co-Chairs
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